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Book Reviews

I. STEWART, *The Problems of Mathematics*, Oxford University Press, 1987, 257 pp.

A good test for the evaluation of any of the "pop math" books that appear with dismaying regularity on the shelves of Christmas-decorated stores is the following: let a professional mathematician pick it up and watch whether he reads it for a period longer than ten minutes. Most of the time, the mathematician will put it down in disgust, after verifying that the contents are the usual pap of Klein bottles, chaos, and pretty colored pictures devoid of a clear meaning. It takes an immense effort (like many immense efforts, one that is likely to go unrewarded and unappreciated by those whom it benefits) to write a truly interesting exposition for a medium-lay public of the cutting edge of mathematics. Most mathematicians (self-destructive and ungrateful individuals that they are, always ready to bite the hand that feeds them) turn their noses away *a priori* at the very thought of such an effort. Little do they realize that such expositions, in our science-eat-science world, are a lifeline of mathematics. We must therefore all join in giving our heartfelt thanks to Ian Stewart, who has written by far the best such book, one that is comparable only to Hilbert–Cohn Vossen and to Rademacher-Toeplitz, one from which anyone who works in mathematics (or in any other science, for that matter) will learn something new.

L. LOVÁSZ AND M. D. PLUMMER, *Matching Theory*, North-Holland, 1986, 544 pp.

This is a state of the art exposition of matching theory that will also make the ideal textbook. Not only is every topic covered, but there are ample motivation and, what is missing in most textbooks, an explanation of the value of each result. The proofs are best possible; any combinatorialist will find that he or she has a lot of catching up to do when reading this treatise. Required on every bookshelf where discrete mathematics books are kept.

F. A. BEREZIN, *Introduction to Superanalysis*, Reidel, 1987, 424 pp.

The late F. A. Berezin was the first champion of what is becoming one of the hottest games in town: using positively and negatively signed variables in a mathematical theory, which was formerly done with variables of one signature only. The results are often startling and unexpected, and another grand unification is in the offing.

E. ARBARELLO, M. CORNALBA, P. A. GRIFFITHS AND J. HARRIS, *Geometry of Algebraic Curves*, Springer, 1985, 386 pp.

A worthy successor to the four-volume classic by Enrique-Chisini, this treatise (of which other volumes are promised) brings us up to date in a civilized and readable fashion in a field that is one of the eternal mainstays of mathematics, one of the great sources of new ideas, and one of inspiration for future generations of mathematicians.